LAND MANAGEMENT PLAN

MONITORING REPORT

Fiscal Year 1999

This Monitoring Report assesses implementation of the Land and Resource Management Plan for the Pike and San Isabel National Forests and the Comanche and Cimarron National Grasslands (PSICC Plan). The PSICC Plan was approved in September 1984, and the monitoring requirements are listed in Chapter IV. This report summarizes monitoring information for the past 15 years of plan implementation.

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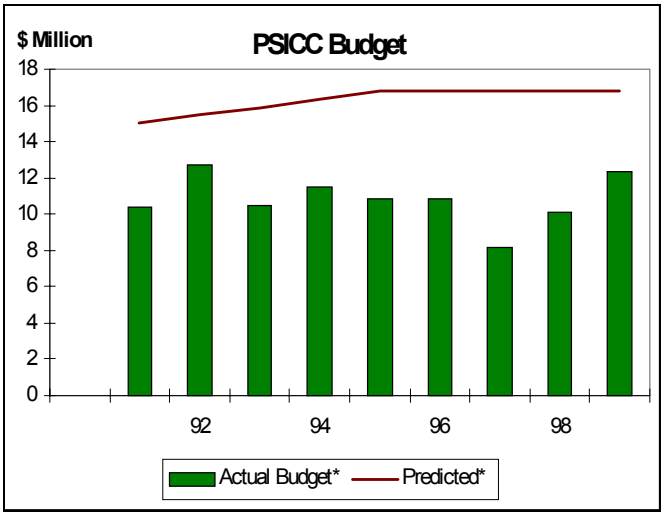
INTRODUCTION

PSICC includes 2.8 million acres of public lands, consisting of the Pike National Forest, San Isabel National Forest, Comanche National Grassland, and Cimarron National Grassland. These units are located in central and southeastern Colorado, and in southwestern Kansas. Management of PSICC is highly complex because its units span a variety of ecosystems, social settings, and economic spheres. Additionally, management of PSICC must be integrated with the needs of two state governments and 17 counties.

The PSICC Land Management Plan was developed with a focus on the needs of the resources being managed and the desires of the various publics being served. Predicted rates of accomplishment were assumed to be commensurate with the needs identified at that time. As is apparent in many of the following sections, implementation has not kept pace with predicted rates. The accompanying chart shows a comparison of predicted budgets with funds actually received for National Forest System operations and construction. The discrepancy is striking, and future projections are not expected to show improvement. *The budget figures in the chart exclude fire and trust fund dollars, because these funds are extremely variable and are outside of the constrained budget for National Forest operations and maintenance.



PSICC has compensated for fluctuating budgets by forming partnerships with others who are interested in the management of public lands. Within available funding, the Plan's goals are being pursued, though specific objectives are not being achieved at the expected rate.

A note on terminology: Various charts appear on the following pages. The following terms are used in the legends of some of those charts:

Objective – Land Management Plan Objective
Prediction - Predicted in Environmental Impact Statement for the Plan
AUM - Animal Unit Month, describes grazing outputs (1AUM=1cow for 1month)
FY98 – the federal Fiscal Year is from October 1, 1997 – September 30, 1998
MRVD - Thousand Recreation Visitor-Days, describes use, 1 visitor day = 12 hrs
MPAOT - Thousand Persons At One Time; PAOT's describe the capacity of campgrounds and other developed recreation sites, 1 campsite = 5 paot's
MMBF - Million Board-Feet, used to describe timber program outputs (1 Board Foot = a square that is 1 foot long x 1foot wide x 1 inch thick)

A note on data gaps: Some of the charts on the following pages may appear to indicate no outputs, where some would be expected. These are data gaps, sometimes caused by changing reporting procedures which complicate the compilation of data for this report.

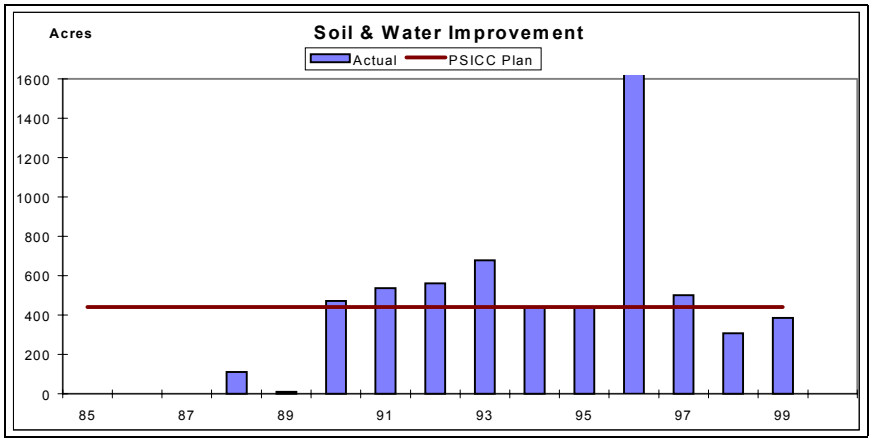
PHYSICAL COMPONENTS

Soil and Water Resources

The soil resource program is concerned with the development of technical soils information for resource management and planning, to manage soils for sustained productivity as identified in the National Forest Management Act (NFMA). Most activities related to Land Management Plan implementation require the use of interpretative information to provide advice regarding the soil resource and its response to use and management. The monitoring of the soil resource program can be divided into three major functions, which are soil inventory, soil and water improvement, and soil monitoring.

Soil Inventory – is recognized as a prerequisite to land management planning and implementation. Baseline data collection is a fundamental requirement to support the resource management mandates identified in NFMA. Modern soil inventories use an integrated approach to describe and map biotic and abiotic features consisting of geology, landforms, climate, vegetation, and soils. Soil surveys for the PSICC have been conducted in cooperation with other federal and state agencies. There are a total of 8 major survey areas on the PSICC. Each area differs in quality of mapping, interpretations available, and status. Three of the survey areas have modern published surveys. During the past five years the PSICC has completed the mapping and draft manuscripts and interpretations for the remaining five survey areas.

Soil and Water Improvement Program - The future use of Federal lands depends upon the protection and maintenance of the soil and water resources. Improving the conditions of watersheds is important for maintaining the long term health of the forests and grasslands. The PSICC Plan direction includes improvement of 440 treated or 1200 affected acres each year. The graph below represents the treated acres. The PSICC has implemented over 400 soil and water improvement projects since the signing of the Plan in 1984. These improvements have led to more than 6000 acres of treated or improved land. In addition, burned area restoration treatments in FY96 have resulted in another 7000 acres of treated lands. The goals of the program are to identify watershed condition, prescribe and implement land treatments, and in some cases to modify land management to: protect life and property, protect and improve water quality consistent with the Clean Water Act, reduce damaging erosion and sedimentation, improve species habitat, increase long term soil productivity, and ensure long term health and sustainability of watersheds given the variety of demands on the land.



These goals are met through a variety of treatments and recommendations for land use management. Over the past 15 years projects have emphasized improvement of watersheds and stream systems that are exceeding state and federal water quality thresholds and standards for sedimentation. Although, the PSICC is making progress on restoration of degraded watersheds, there are still many areas to restore, and many new demands for land use.

Burned Area Rehabilitation - In 1996 there were three project fires that were approved for emergency rehabilitation funding. The rehabilitation of these fires was in addition to the Plan level of watershed improvement. Approximately 7000 acres were treated on the three fires in FY96. The treatments included revegetation, overland flow reduction and reduction of sediment transport. The largest of the three fires was the Buffalo Creek Fire, which was 12,000 acres. The fire was followed by two significant flood events, which caused additional erosion, and further devastated the watershed. The Buffalo Creek area will be monitored for several years to determine the needs of additional treatments to reduce potential losses to downstream water quality.

Soil and Water Monitoring - Soil and water quality monitoring provides the resource manager with information regarding the effects of management decisions and activities on the soil and water resources. The PSICC Plan standards and guidelines, and state and federal regulations provide the long-term management objectives and actions for protection of forest and grassland resources. Soils, Hydrology, and Fisheries specialists have been working on the Inland West Watershed Assessment. Intensive sediment and flow data is being collected on 3 streams to determine sediment-flow relationships on 3 hydrographic regions on the PSICC.

Soil Quality Standards have been established in Region 2 to provide threshold values for documenting significant reduction of soil productivity potential. These threshold values serve as early warning signals to indicate when further alteration of soil properties would significantly change or impair the productivity of the soil. Past monitoring efforts on the PSICC have typically involved visual assessments of contract provisions and mitigation designed to reduce degradation of soil and water resources. These include the monitoring of projects such as timber sales, recreation areas, roads and trails, and facility construction. More detailed quantitative soil monitoring is being conducted on selected resources issues. These include specific impacts of management such as soil erosion losses associated with prescribed burning, compaction on grazing units, sedimentation from road systems, and burned area sediment transport. Future monitoring activities will include both qualitative monitoring of projects and more detailed studies of specific management uses and issues on the PSICC.

Water Rights – The goals of the program are to determine and obtain rights to instream flow volumes to protect and maintain the stream channel stability and capacity, and to accomplish any proposed increase in water use or resource activity. The USA filed for reserved instream flow water rights on the Pike and San Isabel National Forests with the State of Colorado, in the Arkansas River Basin. In FY98, the PSICC was actively involved with negotiations with interested parties, and collecting data for this adjudication. This involved approximately 120 streams. Another responsibility is to protest water right applications of others when such uses will lower stream flows below levels acceptable for National Forest uses and purposes. The water resumes for the South Platte and Arkansas Divisions, compiled by the State Engineers Office are reviewed each month. PSICC files a statement of opposition to those water applications that will injure the water right of the USA.

Air Resources

In response to requirements in the Clean Air Act, in 1994 PSICC initiated a long-term monitoring program to develop baseline data for evaluating air quality-related values in Wilderness areas. High-elevation lake chemistry is being monitored annually at various locations in the Mount Evans, Holy Cross, and Sangre De Cristo Wilderness areas. Visibility is being monitored for the Mount Evans Wilderness, and a camera was installed in 1997 to monitor visibility in the Collegiate Peaks and Mount Massive Wilderness areas. The data collected via these efforts will be used not only for evaluating current relationships between air quality and Wilderness values, but also for reviewing any future projects proposed by others involving significant air emissions that may affect PSICC's airsheds. Several years of data will be needed before firm conclusions can be made. In addition, all Forest Service prescribed fires are managed to comply with State and Federal Air Quality regulations.

Mineral Resources

Energy Minerals – Cimarron and Comanche National Grasslands have the majority of the oil and gas leasing, exploration, development, and production activities. There has been renewed leasing interest along the Front Range. San Carlos and Pikes Peak Districts now have areas under lease in the Wet Mountains south of Canon City and the Rampart Range northwest of Colorado Springs. An exploratory well has been drilled on private land adjacent to the Forest south of Canon City. Extensive seismic and other geophysical and geochemical exploration has taken place over the years.

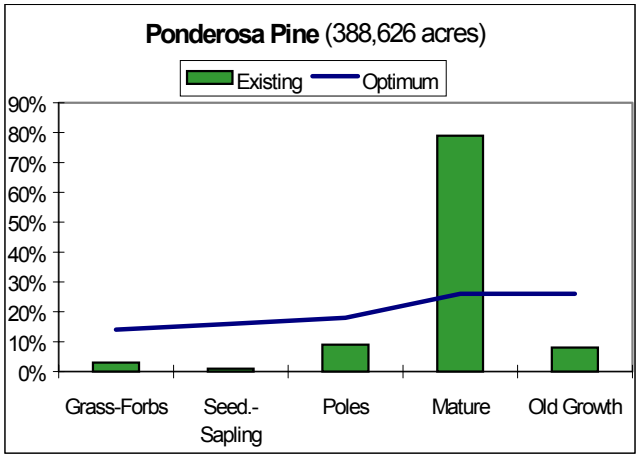
Locatable Minerals – South Park, Leadville, and Salida Districts have the majority of mining and exploration activities. Small commercial operations such as gold placering and mining for amazonite and smokey quartz crystals make up the majority of operations. No major or moderate exploration, development, or production operations have taken place. Recreational mining activities such as panning, dredging, and rock hounding are increasing slightly.

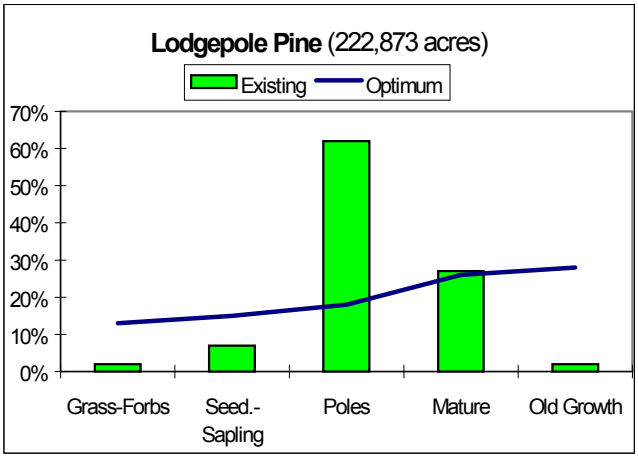
BIOLOGICAL COMPONENTS

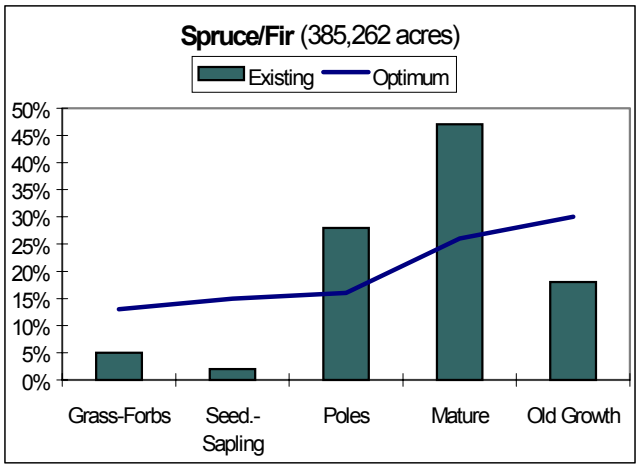
Wildlife, Fisheries & Rare Plant Resources

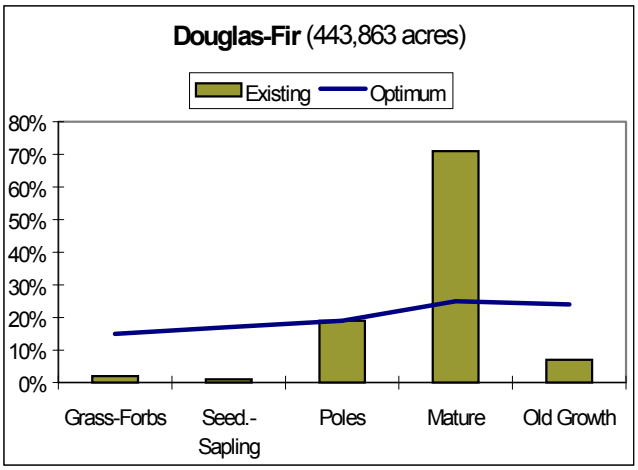
Accomplishment of joint wildlife objectives – Forest Service personnel meet regularly with the Colorado Division of Wildlife regarding wildlife objectives and opportunities for projects that will help achieve shared objectives. Various other partners are also included where their resources could be made available for pursuit of mutual objectives. The main areas addressed to date have dealt with big game, particularly bighorn sheep and elk. The best example of agencies working together for wildlife is the DOW's Habitat Partnership Program (HPP). Each HPP Committee includes representatives from DOW, FS, BLM, Landowners & Sportsmen's groups who meet to solve big game and forage conflicts on public and private lands. There are 3 HPP committees on the PSICC, one for each of the Sangre De Cristo, Arkansas River, and South Park areas. There are also two Antelope Conflict Resolution (ACR) committees that include the Comanche grasslands.

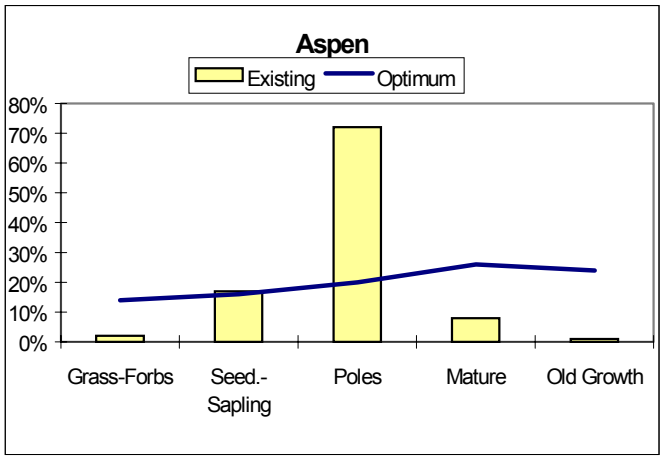
Wildlife Habitat Diversity - Analyses made during development of the Plan compared existing diversity of forested lands with an optimum mix of ages that would support a wide variety of wildlife species. The results for PSICC's major forested stands are shown below.





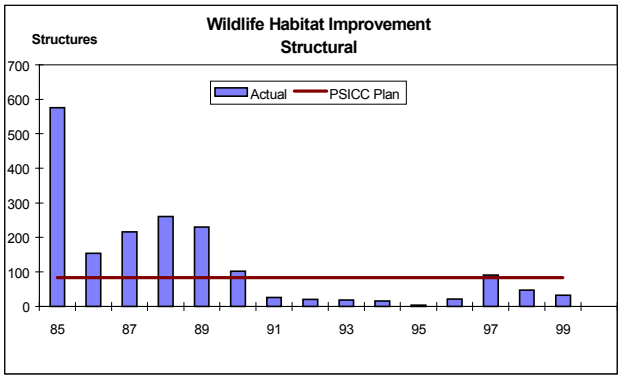


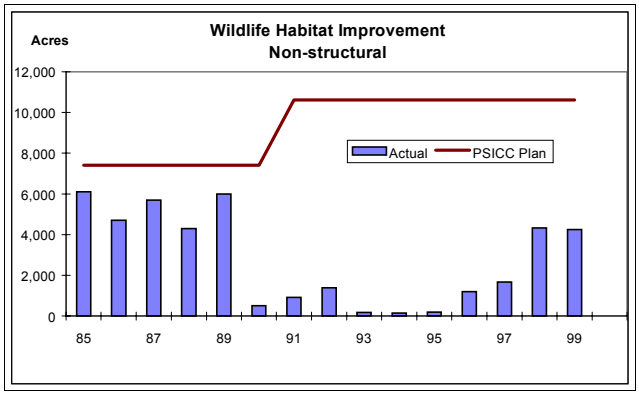




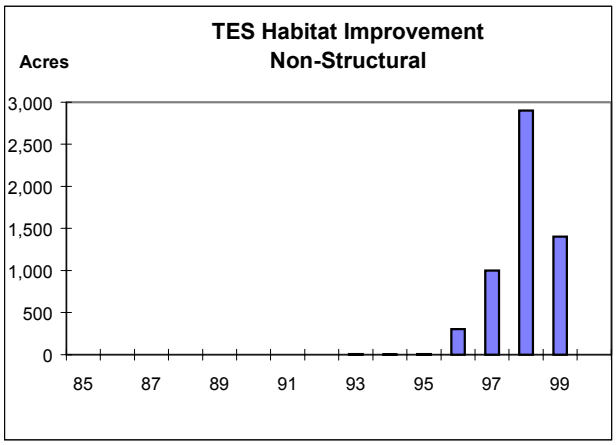
The conclusion drawn in 1984 was that an imbalance existed, with relatively young stands and old growth being underrepresented. Consequently, one intention of the Plan was to focus forest management in over-represented structural stages and produce a forest having a more optimal mix of habitat characteristics. Since very little forest management has occurred, the situation is about the same except that most of the vegetation is now about 15 years older.

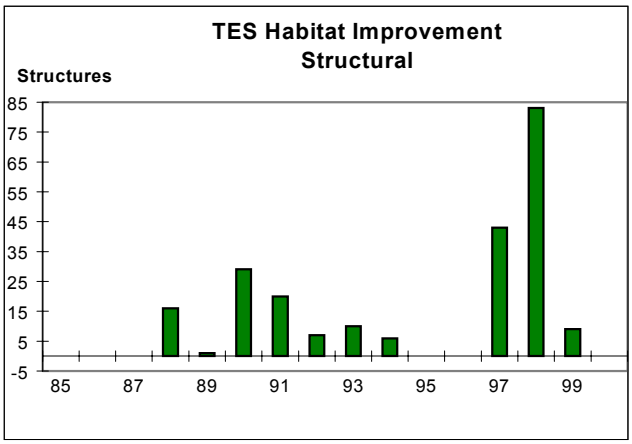
Habitat Modification and Improvement – Until recently, the wildlife habitat modification and improvement program has been declining. This was due to a shift of emphasis to mapping, inventory and landscape assessments. Financial resources were diverted into inventory, Ecosystem Management and monitoring efforts to gain a better understanding of PSICC's habitat, particularly its riparian areas. With the shift to Ecosystem Management, better wildlife decisions can be made at the landscape level. The new information obtained will support better project designs in the future. Partners have now become an important source of funding for projects, although more partnership money is available than PSICC funds can match and utilize. The amount of project work has nonetheless begun to increase in recent years. On the Forests and Grasslands, a key source of funding comes from other programs seeking expertise to mitigate adverse effects on wildlife.





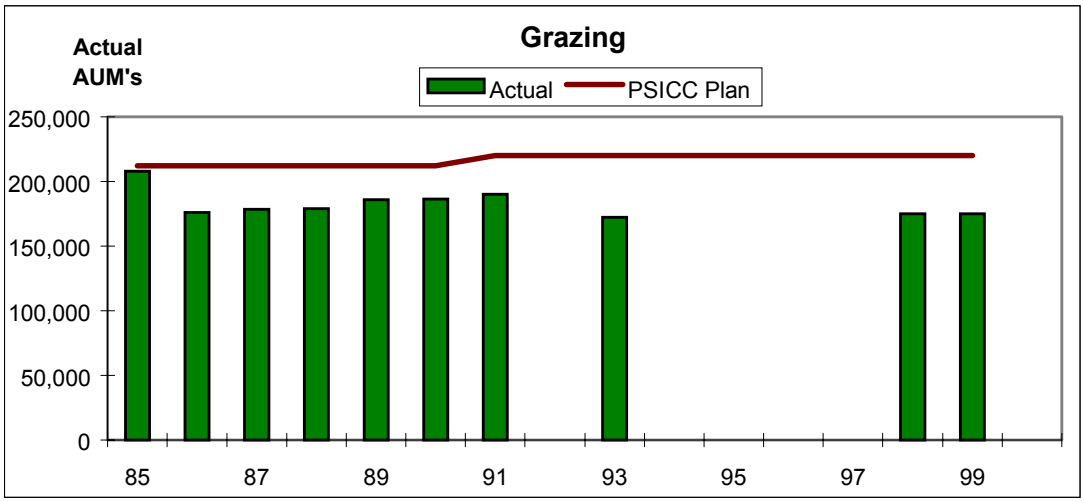
Threatened, Endangered and Sensitive species - Emphasis in this area has focused on completing inventories to establish baseline species population and distribution information. Habitat improvement has primarily involved work necessary to support reintroduction of the greenback cutthroat trout and the peregrine falcon. Prescribed burning has been used to restore ecosystem structure and composition for both forest and grassland threatened, endangered and sensitive (TES) species. Partnerships are an important part of achieving these accomplishments. Due to the importance of TES species, Plan Revision will focus on maintaining the ecological integrity of the systems that support these species, with increased emphasis on protecting biodiversity.



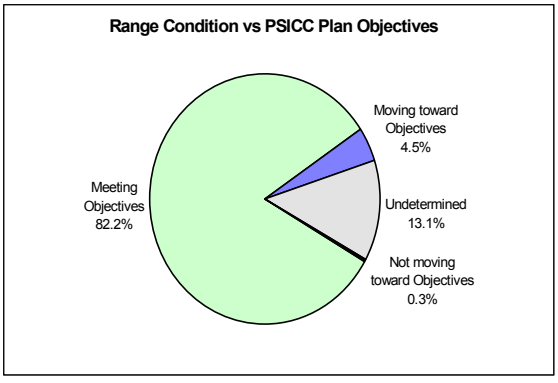


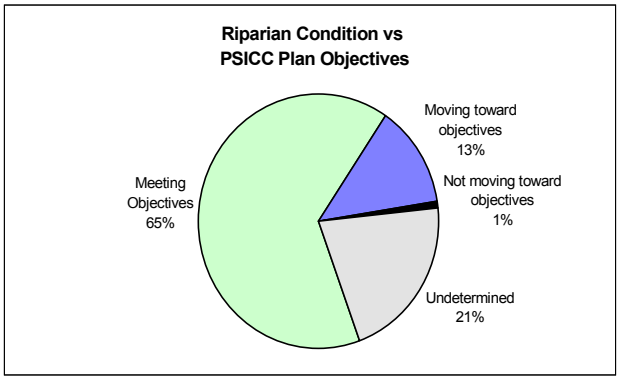
Range Condition and Use

Most of PSICC's grazing program, in terms of Animal Unit Months (AUM's) and allotments, occurs on the Comanche and Cimarron National Grasslands. As shown in the chart below, grazing levels have been relatively stable, with moderate reductions, rather than the increase predicted in the Plan.

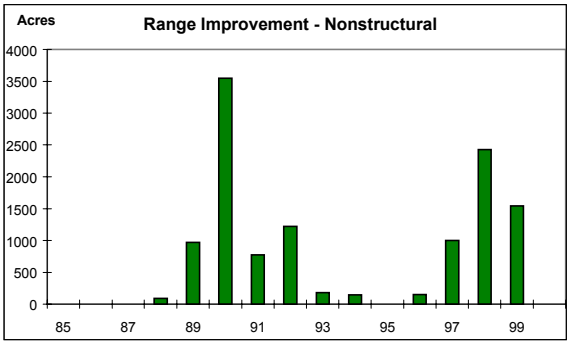


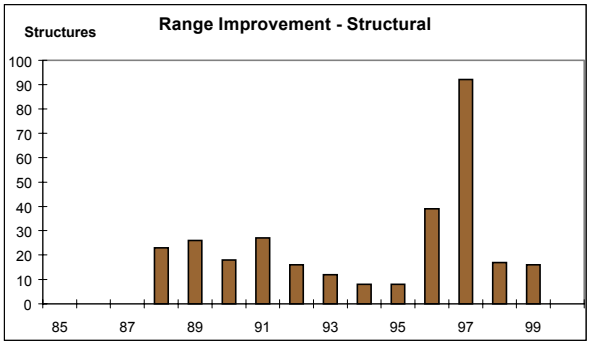
Annual monitoring indicates that range and riparian conditions are generally meeting or moving toward Plan objectives, as shown in the charts below:





A history of range improvement work is shown below. Nonstructural activities typically involve prescribed burning. Structural improvements typically include stock ponds and fence construction.



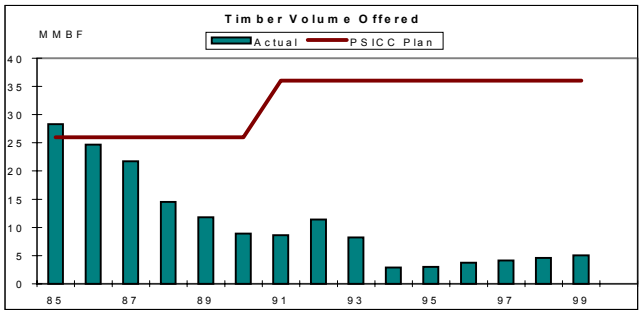


Allotment Management Planning - In accordance with the Recessions Act of 1995, the PSICC and other National Forests have established schedules for updating allotment management plans. PSICC's schedule has focused on the Grasslands for the past several years.

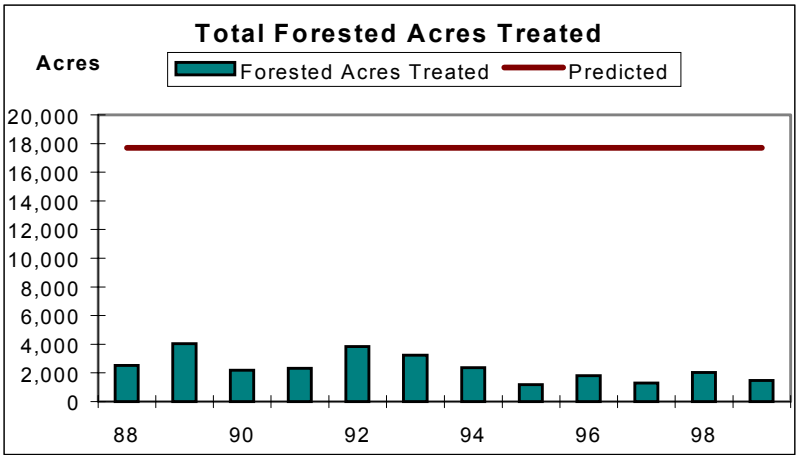
Allotments on the Grasslands are managed through four grazing associations and one grazing district. As such, a grazing agreement for an association covers a large number of allotments. Allotments associated with the Kim, Timpas, Campo and Pritchett Grazing Associations, located on the Comanche National Grassland, have been reviewed and decisions on management and renewal of the agreements have been made. Analysis supporting this work has provided valuable new information on conditions found in the allotments. Key findings: (1) range condition is generally meeting Forest Plan objectives—a situation largely attributable to improved management of the vegetative resources; (2) some riparian areas are still not meeting Plan objectives and have required a modification in management to improve them to desired levels; and (3) while some resource conditions—such as in riparian areas--are needing work, the overall framework established by the Plan appears to be suitable to the areas. The major land allocations in the Plan are appropriate. Some modification of Plan standards and guidelines may be needed to better address certain habitat-related issues that are unique to the grasslands. For the most part, the Plan appears to be working reasonably well, especially for the range management program on the Comanche Grassland.

Forest Condition and Use

The 1984 PSICC Plan established an allowable sale quantity of 37 million board-feet, per year, with timber offer targets gradually approaching that level over time as progressively more acres were put under management. Approximately 1,065,220 acres were considered suitable for commercial timber harvest. In 1984, much of the timber sold was being used for fuel wood in response to high energy prices. But eventually energy prices dropped, and so did the demand for fuel wood. In addition, the economics of harvesting timber on PSICC were such that, once the below-cost issue began affecting policy, funding for the PSICC commercial timber program was curtailed to a level

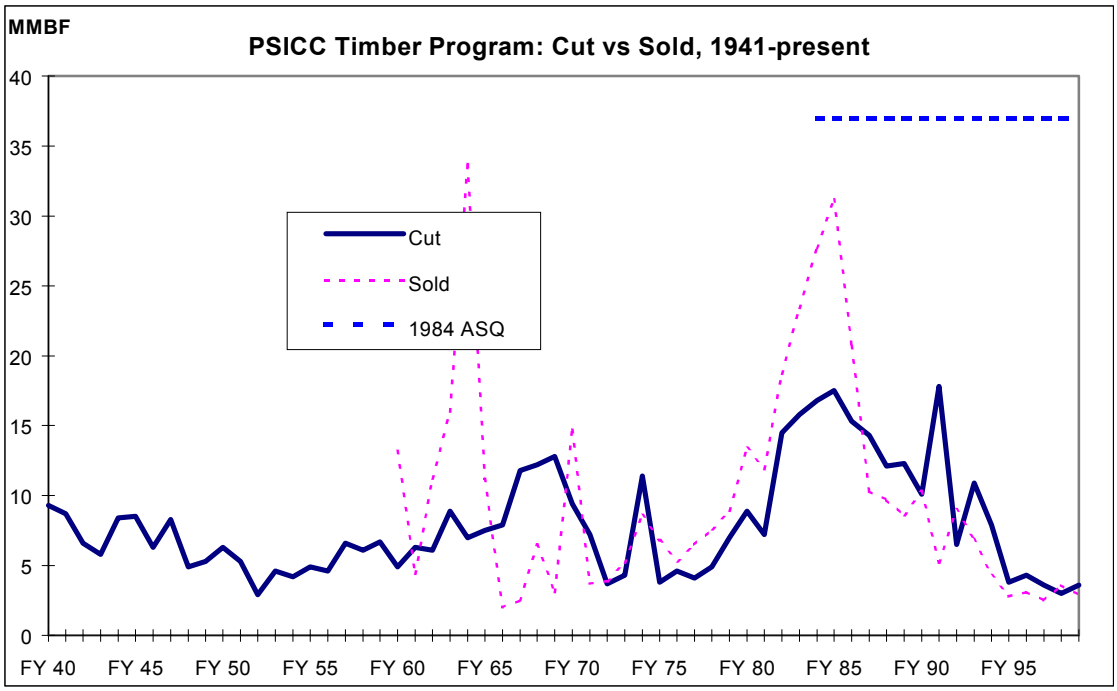


well below plan projections. By FY94, the timber program had declined to historically low levels, with most of the volume harvested still being sold for fuel wood.

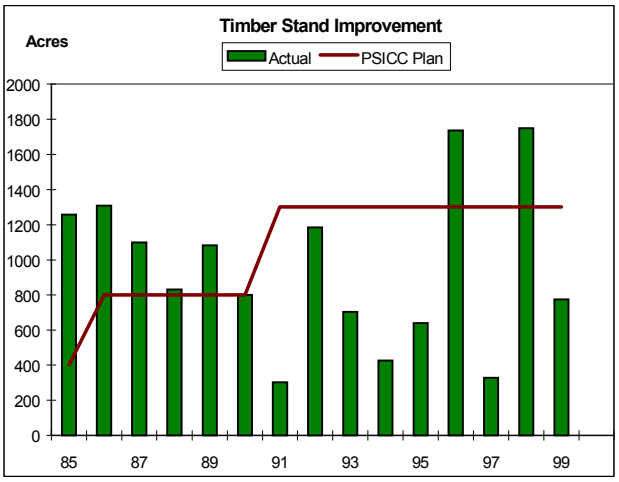


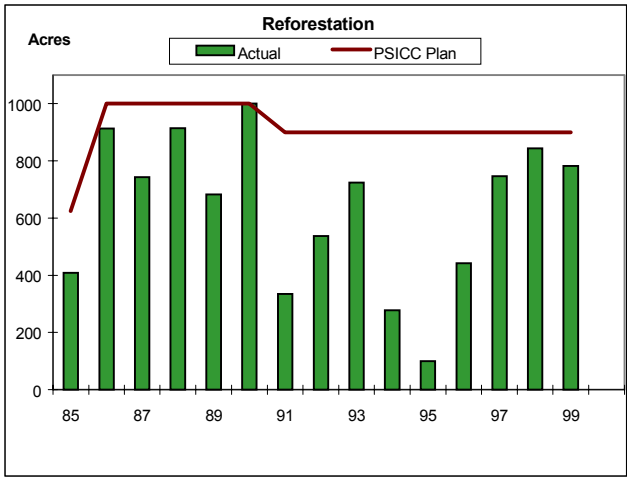
As shown in the chart above, the rate of treatment of forested acres by all types of projects that modify forested vegetation, has not kept pace with predictions. (See also the table on acres treated in the Appendix of this report.) The net effect is that the situation in 1984 has not appreciably changed, except that most of the trees are about 15 years older.

Forest management on the PSICC is not keeping pace with the rate of growth occurring in the forests. This is resulting in increased insect and disease infestations, as well as ominous fuels buildup. A situation of increasing severity is emerging, particularly along the Front Range on the Pike National Forest, where the Buffalo Creek fire occurred. Steps are being taken to (1) build a new and active forest management program, (2) seek possible markets for the types of smaller-sized wood products whose removal would best benefit forest health, and (3) Use timber sales as a tool to achieve natural resource management goals. See also the discussion under fuel treatment below.



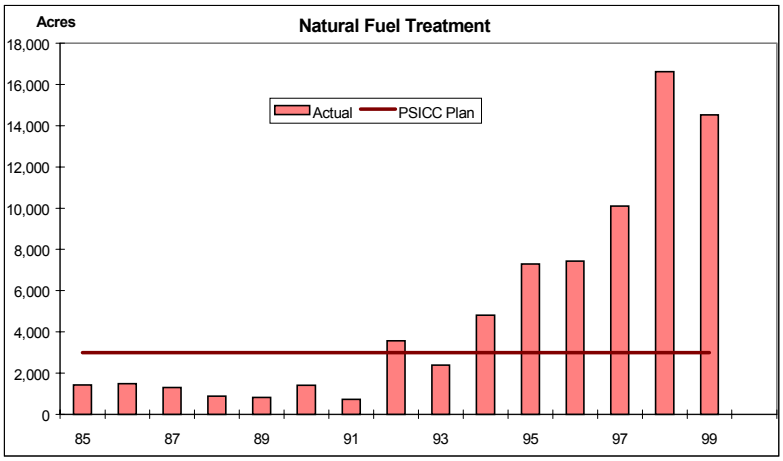
Reforestation and timber stand improvement activities have been quite variable over time, as shown below. Funds for these activities are primarily obtained from timber sale revenues. The more recent increases starting in FY96 are due to restoration efforts after the Buffalo Creek fire.





Acres harvested by cutting method are tabulated in the Appendix. All methods employed have been consistent with the PSICC Plan.

Fuel Treatment



Treatment of fuels has increased dramatically in recent years. This is in response to the growing recognition that fire suppression throughout the century has resulted in significant fuels accumulations that increase the risk of catastrophic fires. Fuel treatment activity levels are thus increasing in an attempt to deal with this.

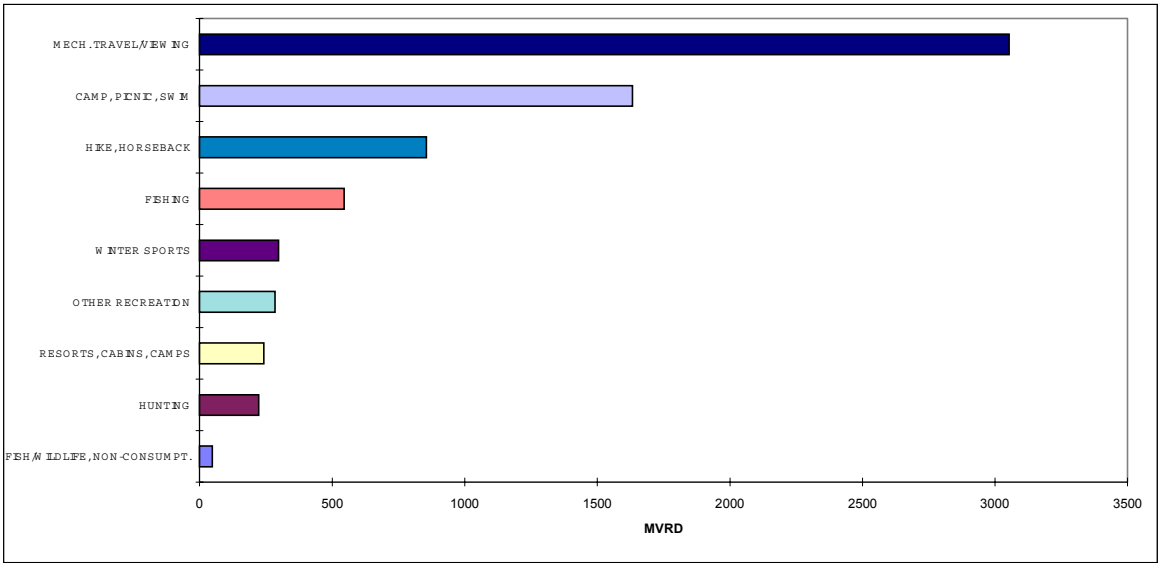
In May 1996 the Buffalo Creek fire burned over 10,000 acres of forested land on the South Platte District. The fire was in Ponderosa Pine-Douglas fir. The fire was wind-driven and did most of its burning in a single afternoon, destroying six homes. At many other locations throughout the Front Range, a fire of similar configuration could have destroyed hundreds of homes. The fire serves as a reminder of the growing need for projects that will reduce fuel levels and lessen the potential for catastrophic wildfires all along the Front Range. In order to meet the needs of forest health, wildland fire hazards, and firefighter and public safety, the Red Zone Strategy was developed. The Forest is working collaboratively with other agencies and local communities to start treating the areas of high development and highest risk for insect outbreaks, disease or wildland fire.

The Forest is currently working on a fire management amendment to the Forest Plan that would provide additional guidelines for ecosystem restoration. Given the backlog of restoration already facing the PSICC, the purpose of the amendment would be to: 1) provide more flexibility in responding to wildfire situations; and 2) establish priorities to restore natural fire regimes, guide future wildfire prevention work, and assure that the PSICC's limited resources are being directed to where they can provide the most good.

SOCIAL COMPONENTS

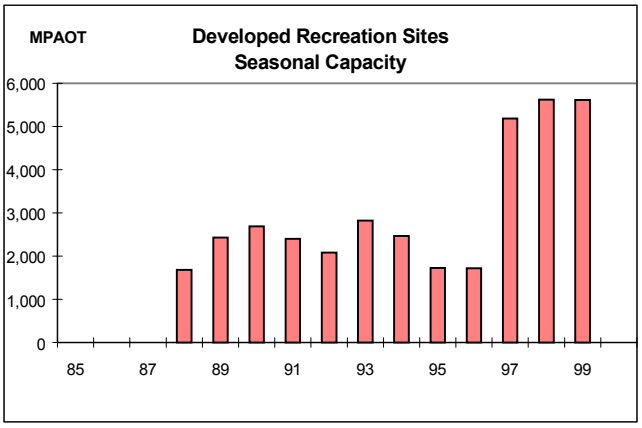
Recreation

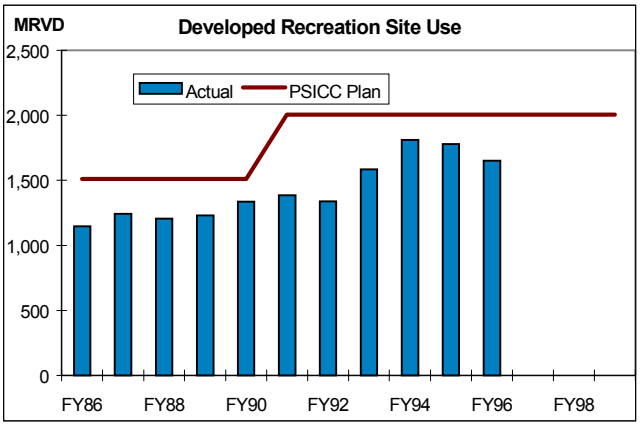
PSICC has one of the heaviest recreation workloads in Region Two. Much of this stems from its location near the Denver, Colorado Springs and Pueblo metropolitan areas. The leading type of recreation is related to driving for pleasure, whether in automobiles on highways or by using off-highway vehicles on lower-standard roads. Use information has not been compiled since the end of FY96.



Developed Recreation

A significant portion of the recreation visits occur at developed facilities, particularly campgrounds. These facilities used to be operated primarily by Forest Service personnel, but PSICC has now placed most of its fee-collection facilities under concessionaire management. The increase in developed site capacity beginning in FY97 is primarily due to the addition of developed trailhead parking areas.





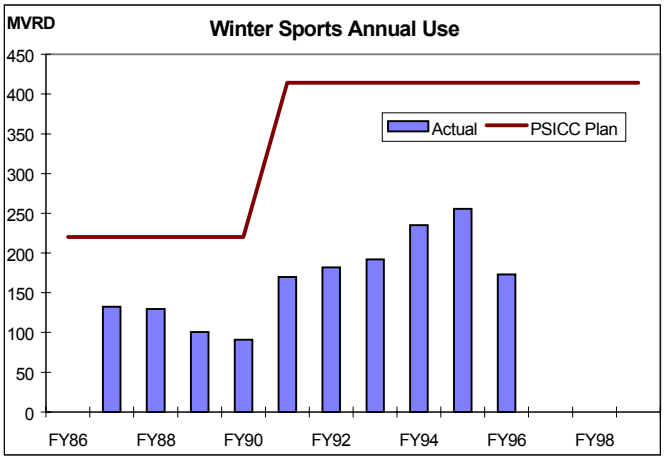
Recreation Facilities Backlog - PSICC has a strong recreation component to its overall program. It is also "urban" in character because more than 2 million people live within easy weekend driving distance. Many of the developed campgrounds were built in the 1960's and are significantly deteriorating over time. Operation and maintenance dollars have not kept pace with this deterioration, creating an increasing backlog of work needed.

The following inventory of maintenance backlog needs was initially made in FY94, and updated in FY97:

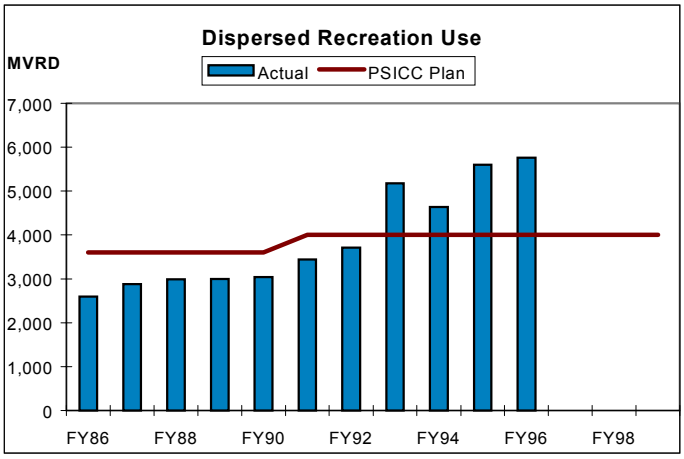
RECREATION FACILITIES BACKLOG	EST. COST
Health and Safety - costs needed for facility repair and reconstruction and resource treatment needed to comply with health and safety standards	6,530,500
Resource Protection - costs for resource treatment needs including vegetation treatment, soil & surface treatment, and cultural resource site protection & mitigation	9,527,564
Work Needed to Avoid Closing Sites - costs for facility repair and reconstruction and resource treatment needed to keep a site open in compliance with planned management standards	4,982,797
Site Work Needed to Return to or Continue a User Fee System - This category includes costs for facility repair and reconstruction and resource treatment needed to meet standards required for user fees	599,003
Facility Elimination - costs to remove facilities and restore the previously occupied area to a condition that meets planned management. standards	3,356,815
Other Backlog Needs - Recreation facility backlog costs not included in the previous five categories.	10,098,533
Trail Maintenance & Reconstruction – Restoration, repair, and Resource treatments are needed to return trails to planned management standards. These tasks are in addition to recurrent maintenance requirements.	4,210,828
Total Backlog Cost	**41,306,040**

Winter Sports

PSICC has three operating ski areas: Ski Cooper, Cuchara Valley, and Monarch Resort. Three areas that were in operation when the Plan was approved are now in various stages of being closed: Pikes Peak (which has been reclaimed); Geneva Basin (which is mostly reclaimed) and Conquistador (now Hermit Basin, which is being reclaimed). Quail Mountain, southwest of Leadville, was identified as a possible ski area development, but a facility has not been established. The current capacity for downhill skiing appears to be greater than the demand at most of the areas.



Dispersed Recreation

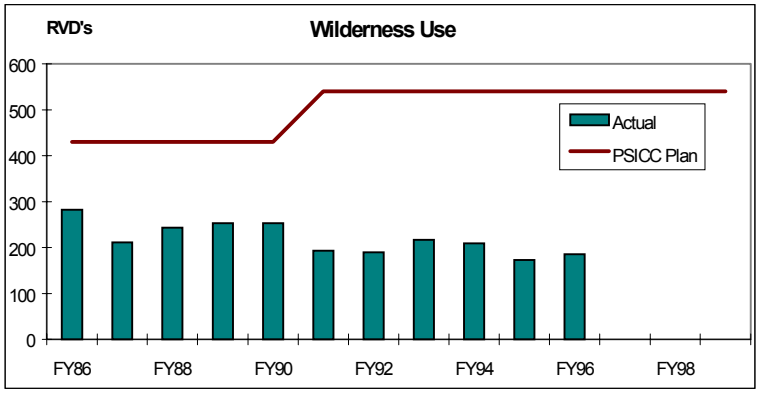


Dispersed Recreation includes all of the activities that occur outside of developed facilities. Because of its proximity to the Denver, Colorado Springs, and Pueblo metropolitan areas, PSICC receives a large amount of dispersed recreation use. Dispersed recreation constitutes the largest share of total recreation use. In recent years visitor levels have exceeded projections made in the current Plan. Right after the Plan was approved, PSICC recognized the importance of implementing the travel management direction in the Plan. PSICC has used the White Arrow Program, to restrict motorized travel to designated roads and trails. Over the past 15 years, most districts have done a thorough job of maintaining Forest system roads and trails, and obliterating and rehabilitating illegal or unneeded routes.

Wilderness Recommendations - Four Wilderness Study Areas (WSA) and one Further Planning Area (FPA) were reviewed during development of the Plan and suitability findings were made in the Record of Decision. In 1993 Congress designated 4 new Wilderness areas on the PSICC. The following chart shows the current status of those areas.

Area	Found Suitable?	Wilderness Today?
Buffalo Peaks WSA	Portions	Yes
Greenhorn Mountain WSA	Yes	Yes
Spanish Peaks WSA	No	Legislation Pending
Sangre De Cristo WSA	Portions	Yes
Lost Creek Addition FPA	No recommendation made	Yes

Recreation Capacity Study - PSICC completed a Forest-wide study of recreation capacity. The study was initiated in 1993 in response to concerns that certain areas, particularly in Wilderness, were being unacceptably impacted by increasing numbers of visitors. Ironically, even though Wilderness use has not been increasing, impacts to Wilderness were becoming more problematic due to a concentration of use in certain areas. Routes for climbing the peaks over 14,000 feet have become particularly popular and are receiving heavy use. With four newly designated Wilderness areas, very high public use on most of the forest, and an increasing number of applications for outfitter-guide permits, PSICC set out to analyze visitation and impact levels in

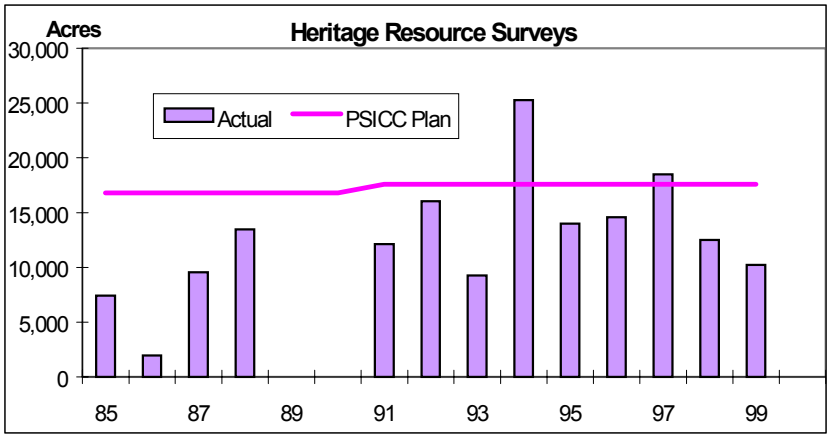


comparison to Plan direction. A moratorium on new outfitter-guide permits went into effect pending completion of the study. In 1995 the study was completed, with the finding that many areas were at or exceeding capacity. In the highest overuse areas, outfitter-guide permits were cut back, while in other areas no new permits were allowed. Steps are being taken to reduce public use in those problem areas as well. As a follow up to the study, selected high use areas are being monitored and managed more strictly. Capacity refinements and use adjustments are being made as time and priorities allow.

A secondary result of the study were the observations that (1) management area direction in portions of some Wilderness areas was mismatched with current uses, and (2) certain standards and guidelines had become out-of-date with current theory regarding management of dispersed recreation use in Wilderness. These corrections will be made during Plan revision.

Heritage Resources

Cultural resources compliance inventory and sites recording -
Areas where ground-disturbing projects are being planned are inventoried for cultural sites; and discovered sites are recorded and evaluated.



In the mid- and late- 1980's the bulk of this work was done to support timber sales and vegetation treatment projects on the mountain districts. In more recent years the focus has been on inventory of grazing allotments (primarily on the Grasslands), and on large prescribed fire projects designed by the fuels, wildlife, and range programs. Also, recent focus has been on inventory of the Picket Wire Canyonlands, a special management area with an extremely high density of archeological sites, and on Pikes Peak, a National Historic Landmark. In FY99, a total of 235 previously unrecorded cultural properties (sites) were recorded. In the three year period 1997-1999, 705 properties were recorded. In FY99, the heritage staff implemented studies to determine deferred maintenance needs at heritage sites. As part of this initiative, 51 prehistoric sites were tested to confirm their archeological content.

Interpretation, Protection, and Public outreach - This part of the program consists of interpreting non-vulnerable heritage sites for the public, protecting important historic resources against natural deterioration and vandalism, and offering public opportunities to participate in heritage resource management. In recent years our interpretive efforts on the Grassland units have focused on the Santa Fe Trail and the historic and prehistoric resources of Vogel Canyon. For the mountain units interpretation has focused on historic mining areas, railroad and homestead sites, in areas such as Chalk Creek, Twin Lakes, Kenosha Pass, the Mingus Homestead, and the Pikes Peak. In FY99, additional emphasis for protection was given to monitoring conditions at known significant sites, and 154 sites were monitored. In order to involve the public, 8 Passport In Time

(PIT) projects were accomplished including site repair in the Picketwire Canyonlands, and site surveys in the Spanish Peaks and Pikes Peak areas. The PIT projects are designed to work with volunteers to accomplish work that the Forest Service could not do using regular appropriated funds.

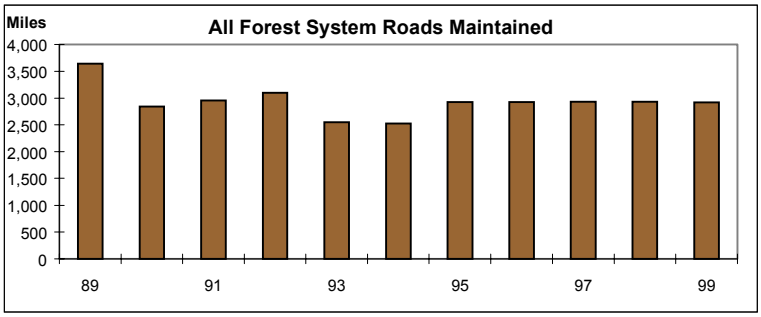
Heritage Activity	FY94	FY95	FY96	FY97	FY98	FY99
Heritage Sites Interpreted	10	18	10	16	40	12
Public Participation Projects		12		6	9	8
Number of Properties (cumulative)	1276	2158	2343	2741	2823	3056
Heritage Sites Preserved and Protected	10		45	50	69	156
Heritage Sites Evaluated	28	475	173	150	240	265
Resource Facilitation Projects	121	92	67	113	155	158
Inventory/Acres Surveyed	25,285	14,000	14,600	18,460	12,491	10,246

Visual Quality Objectives

Visual quality objectives (VQO's) are being maintained. Activities having the potential to adversely affect VQO's have been designed to avoid such effects. New methods of inventory and management for scenic quality have been developed, and will be used for Plan revision.

Transportation & Travel Management

The chart to the right shows total miles of roads identified as system roads that are available for public use. This use can vary from full use by the public with vehicles, to administrative use only by the Forest Service and designated permitees, to walk in use by the public on roads that are closed to vehicle use.

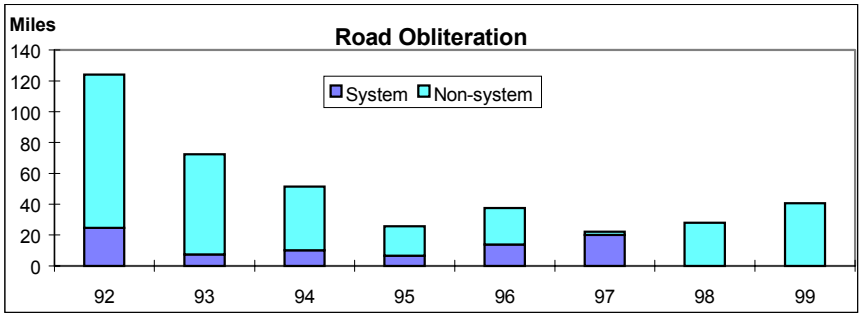


The general decrease in mileage over the time frame shown can be attributed to the following: a) roads have been removed from the system because a decision has been made that they're no longer needed for management purposes; and b) more accurate inventories have shown that some mileages estimated for roads were in error.

Over the past five years, special emphasis has been placed on travel management, particularly the inventory of non-system road and trail routes, along with the analysis and determination of whether

those routes are needed for public access. As shown below, a great deal of road obliteration and rehabilitation work has occurred.

Special road obliteration funding was allocated in FY92/93 to do high priority road obliteration work in degraded watersheds. From FY94 to FY97, there was no special road obliteration funding, so that work was financed out of regular program funding. With decreasing budgets, the total roads obliterated decreased also. In FY98 and FY99 funding again increased for road obliteration. Note: there are numerous other non-system roads or routes identified for obliteration whenever funding becomes available.



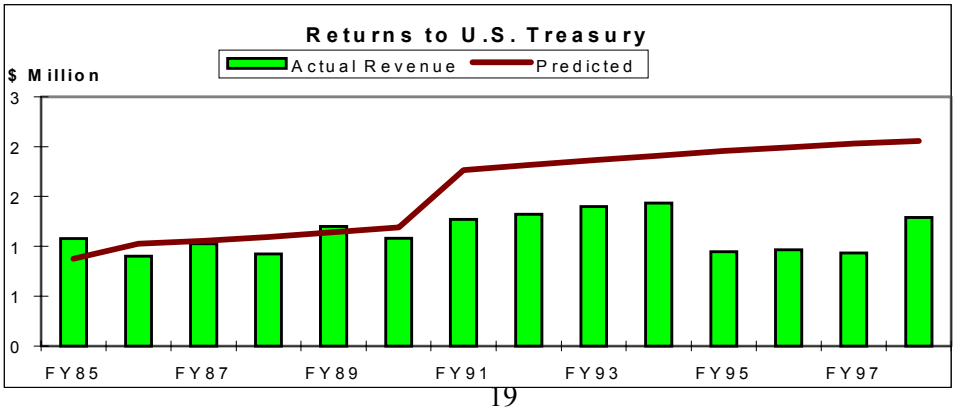
ECONOMIC COMPONENTS

Capital Investments

The Capital Investment Program (CIP) consists of two parts, one funded at the Regional level, and one funded at the Forest level. CIP used to be primarily for roads for general purpose, timber, and recreation use prior to about FY92. After FY92 the emphasis shifted somewhat to include developed recreation areas and trail construction/reconstruction in addition to roads. The Forest part of the CIP has been funded in the $250,000-$500,000 range over the years since 1991. The Regional CIP has been funded in the $700,000 to $2,300,000 range, with the lowest funding in 1996 and the highest in 1992. As stated previously, the emphasis has shifted from roads in the early 90's to developed recreation areas in the late 90's.

Returns to U.S. Treasury

A wide range of activities generate revenues for the U.S. Treasury. These include special use permits (ski areas, roads, water lines, power lines, outfitter-guides, recreation residences, etc.), grazing permits, fuel wood permits, Christmas tree permits, transplant sales, and timber sales, among others. Revenues from oil and gas leases are not shown in the accompanying chart, but are included in the Appendix of this report.



Payments to Counties

In most cases, 25% of the revenues paid into the U.S. Treasury are returned to the counties within which the revenue-generating activities occurred. The flow of these funds to Counties is shown below. The most dramatic change occurred on the Cimarron National Grassland in 1987, when a number of oil and gas leases reverted to the United States. Revenues from those leases have declined in recent years as production has declined. Note that grassland revenues and payments in the chart below are reported by calendar year. Information for calendar year 99 is not available yet.

25 % Fund Payments To Counties By Proclaimed Units
Nominal Year Dollars

Fiscal Year	**FY85**	**FY86**	**FY87**	**FY88**	**FY89**	**FY90**	**FY91**	**FY92**
Pike NF	115,898	103,787	105,173	92,751	127,780	122,124	134,263	117,394
San Isabel NF	123,019	107,703	130,414	119,698	149,169	127,901	149,236	172,006
Comanche NG	145,707	103,185	72,730	45,236	47,240	64,605	111,347	106,777
Cimarron NG	77,852	39,027	4,240,391	3,028,349	1,514,045	1,007,529	541,837	428,047
PSICC Total	462,476	353,702	4,548,709	3,286,035	1,838,234	1,322,159	936,683	824,224

	FY92	**FY93**	**FY94**	**FY95**	**FY96**	**FY97**	**FY98**	**FY99**
Pike NF	117,394	157,919	162,181	91,038	94,520	92,591	157,857	92,481
San Isabel NF	172,006	152,076	175,534	134,596	142,053	120,173	149,073	90,829
Comanche NG	106,777	106,463	59,587	117,975	221,394	632,708	71,530	n/a
Cimarron NG	428,047	737,839	785,574	503,049	627,538	170,706	473,494	n/a
PSICC Total	824,224	1,154,297	1,182,876	846,657	1,085,505	1,016,178	851,954	183,310

Unit Costs and Efficiency – The PSICC as a unit has made tremendous progress toward improving customer service and reducing costs. Efficiencies have been gained through increased inter-agency cooperation and increased work with partners and volunteers.

Unit Costs are extremely variable on a large diverse unit such as the PSICC. Average unit costs tend to oversimplify the complexity of natural resource and ecosystem management work. Since they don't accurately portray effectiveness, unit costs have not been summarized in recent years. It is possible to do so by dividing outputs by either program or project costs. Unit costs have limited utility in Plan monitoring due to (1) the complexities of the budget allocation process, and (2) the diverse nature of many projects. Unit costs may be of some value in relating programs on different National Forests, but are less useful within an individual unit.

AMENDMENTS TO THE LAND MANAGEMENT PLAN

Existing Amendments

Existing amendments to the Land Management Plan are shown in the table below. For several years following approval of the Plan, it was thought that changes in the timber harvest schedule had to be reflected as amendments. When court decisions clarifying the purposes of Plans eventually established that this practice was not required, amendments of this nature were discontinued.

Amendment No.	Date Approved	Summary
1	9/23/85	Clarified intent of Plan implementation schedules (Appendices A, C & D) prepared as part of annual Forest Plan of Work. Rescinded by Amend. No. 9
2	7/24/87	Corrected omission and indicated that bridge construction and reconstruction activities under Management Activity L16 - L18 (Local Road Construction and Reconstruction) are included.
3	7/24/87	Revised boundary of the Comanche Lesser Prairie Chicken Habitat Zoological Area (designated a Colorado Natural Area February 13, 1987), Comanche National Grassland.
4	7/24/87	Included in the Forest Plan assessment of suitability and capability of Quail Mountain for proposed ski area development (Note: Amendment No. 4 Rescinded 10/5/87).
5	7/24/87	Incorporated in the Forest Plan, modified stipulations and supplements contained in FSM 2800 5/86 R-2 Supp. No. 25 for leases and permits issued on National Forest System lands.
6	7/24/87	Replaced fire management standards and guidelines with Regional fire management requirements that had been changed to provide greater flexibility to land managers.
7	7/24/87	Corrected a Forest Plan Map error to more accurately reflect Management Area Prescription application and changed acreage totals in Management Area Summary Table.
8	7/24/87	Corrected information in Forest Plan Appendix B; fuelwood products are not a part of the Allowable Sale Quantity.
9	7/24/87	Rescinds Forest Plan Amendment No. 1.
10	7/24/87	Assigned Management Area Prescription 1D (Provides For Utility Corridors) for certain lands within the Comanche National Grassland and changed Management Area Summary Table III-3 to show a change in the acreage of four Management Areas.
11	8/20/87	Replaced Appendix A (the Ten-Year Timber Sale Schedule) and established a three year schedule of planned vegetation treatment projects.

12	10/5/87	Replaced Appendix C (the Ten-Year Road Construction and Reconstruction Schedule) and established a three-year schedule of planned road construction/reconstruction projects.
13	12/9/88	Recommended establishment of the 373 acre Hoosier Ridge Research Natural Area, South Park District.
14	12/9/88	Assigned Management Area Prescriptions 2B and 4B to 10,290 acres of the Cimarron River corridor, Cimarron National Grassland.
15		
16	1/3/89	Established 3-Year Timber Sale and Road Construction/Reconstruction Schedules (revised Appendices A & C). (FSM 1920, R-2 Supp. No.8, 3/86) (FSH 1909.12, R-2 Supp. No.1, 8/88).
17	1/3/89	Assigned Management Area Prescription 5B to Babcock Hole, San Carlos District (9,021 acres).
18	1/3/89	Assigned Management Area Prescription 1D to Methodist Mountain, Salida District (53 acres).
19	3/2/89	Assigned Management Area Prescription 5B (Emphasis on Big Game Winter Range) in the Dry Union Gulch area, Leadville Ranger District. Change from a 7D Prescription (5,114 acres).
20	12/6/89	Replaced 3-Year Timber Sale and Road Construction/Reconstruction Schedules (revised Appendices A & C). (FSM 1920, R-2 Supp. No.8, 3/86) (FSH 1909.12, R-2 Supp. No. 1, 8/88).
21	6/11/90	Established Scenic Highway of Legends as a Scenic Byway on the San Carlos Ranger District. Incorporated new management direction for Scenic Byways in the Plan.
22	10/4/90	Replaced 3-Year Timber Sale and Road Construction/Reconstruction Schedules (revised Appendices A & C).
23	2/12/92	Oil & Gas Leasing - Incorporated decision made 2/92 to consent to oil and gas leasing. See EIS and ROD.
24	4/9/92	Added Picket Wire Canyonlands per PL 101-501. Also established management area direction.
25	9/21/94	Revised Forest Plan map to establish a utility corridor for the Divide Power Line between Divide and Lake George.

Potential Amendments/Need for Change

Wilderness - Congress established additional Wilderness areas on PSICC in 1993. The Plan Record of Decision identified certain lands as suitable for Wilderness and the Plan's map was accordingly drawn to reflect that finding. When additional Wilderness was established, the final boundaries did not match those shown as recommended on the Plan's map. For this reason, some changes to the Plan's map are needed. In addition, one outcome of the recreation capacity study (see the discussion under Dispersed Recreation) was the conclusion that the pattern of management

prescriptions in certain areas was not consistent with sustainable levels of use. This has led to a modification of outfitter guide permits and some modifications in public use management. In some areas, however, Plan standards and guidelines are still not being met. Both the boundary changes and any needed changes in prescriptions will be addressed in plan revision.

Wildfire Hazard - The Buffalo Creek fire (see Fuels Treatment, Soil and Water) served as a reminder that forested lands are becoming more and more susceptible to catastrophic fires. As reviewed earlier in this report (see Forest Condition and Use), the activity that historically had the greatest effect on this situation—timber harvest--has greatly declined in recent years. The net effect is that forested areas throughout the mountains are becoming more susceptible to catastrophic wildfires and are not meeting desired conditions identified in the Plan.

This situation is not unique to PSICC--it is widespread throughout the National Forests. Because of this, increased funding is anticipated to help work on the situation. Fuels treatment projects have already increased in recent years in an attempt to address the situation, but much more work—embracing a variety of types of projects—is needed. Many years of effort will be involved. Not only are steady-state levels of fuels treatment significantly above those of recent years, but a significant backlog also exists. To help ensure that projects are designed to produce the most effective results, the Plan is being modified to (1) clarify the desired condition of forested lands, (2) establish priorities for the types of areas where treatment would produce the most beneficial results, and (3) modify Forest Direction regarding fuels treatment to provide greater flexibility in prescribed fire management.

Travel Management - A pervasive issue on most National Forests is travel management. In FY97 PSICC began an informal assessment to gain a clearer understanding of the issues involved. The assessment was completed in FY98, and determined that most of the issues have to do with the local administration and enforcement of travel management. Those local issues are best resolved at the local or Ranger District level. Where the issues relate to land allocation, such as Wilderness vs semi-primitive non-motorized vs semi-primitive motorized prescriptions, they are appropriate questions to address at the Plan level. These and other land allocation decisions will be addressed as part of Plan revision.

SUMMARY EVALUATION AND CONCLUSIONS

Are the Land Management Plan's goals and objectives being met? Most of PSICC's goals are being pursued to some degree, but in most cases not at the rate envisioned in 1984. The ambitiousness of the overall program has proven to exceed the funding levels made available.

Are the Plan standards and guidelines being followed? Decision documents being signed by responsible officials are certifying that projects are being designed to be consistent with the PSICC Plan. Monitoring results support those findings.

CERTIFICATION

The PSICC Plan, as currently written, is sufficient to guide implementation for the next year. There are several improvements that can be made to the Plan, but they are not required to meet the goals and objectives. Plan revision will begin in FY2000.

/s/ *Abigail R. Kimbell* — 5/30/2000

Abigail (Gail) R. Kimbell
FOREST SUPERVISOR

Date

APPENDIX

Timber Acres Harvested

Timber Harvest History
Cutting Method and Acres Harvested

Forest Cover Type	Acres													Acres
Cutting Method	**87**	**88**	**89**	**90**	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**Total**
Ponderosa Pine														
Intermediate cuts, Sanitation/ Salvage, Commercial Thin	170	92	243	243	364	1,312	1,459	1,105	27		448	89	75	5,457
Clearcut	11	15	27	0	25	6	0							73
Preparatory Cut (Shelterwood)		26	0	0	0	0	0							26
Seed Cut (Shelterwood)	83	251	378	428	0	80	113					26		1,276
Removal Cut (Shelterwood)	47	38	176	67	0	0	0						300	581
Aspen														
Clearcut	40	101	81	85	140	69	73	49	13	7	9		10	637
Sanitation/Salvage								5	9			37		51
Lodgepole Pine														
Clearcut	57	151	43	38	176	47	156	102	54		130	14	25	936
Seed Cut	0	0	0	0	66	107	12							185
Removal Cut							13			16				
Commercial Thin									50					50
Sanitation/Salvage							8							
Engle. Spruce Fir														
Clearcut	2	64	57	0	150	64	44							379
Prepatatory Cut (Shelterwood)		255	0	54	30	0	27		108					474
Seed Cut (Shelterwood)		0	34	0	553	0	175	430			88	88		1,368
Removal Cut (Shelterwood)		7	0	0	82	0	72					23		184
Selection (Uneven-aged Mngt.)		286	164	150	27	152	0			41	65	7		892
Mixed Conifer (Douglas-fir)														
Intermediate Cut, Salvage, Commercial thin		15	1,689	229	47	416	232	232	278		208		290	3,636
Clearcut		10	0	0	31	13	4							58
Prepatatory Cut (Shelterwood)		386	0	0	0	0	0							386
Seed Cut (Shelterwood)		0	0	0	56	389	51							496
Removal Cut (Shelterwood)		0	59	79	261	0	0							399
Other Species														
Sanitation Salvage, Special Cut, Selection, X-Mas Trees		0	0	0	0	0	93	16	0					109
Total Acres Cut	410	1,697	2,951	1,373	2,008	2,655	2,532	1,939	539	64	948	284	700	17,653

PSICC Revenues

Pike & San Isabel National Forests, Cimarron & Comanche National Grasslands
Revenues by Category FY 85- FY98
Nominal Year Dollars

Revenue Category	FY85	FY86	FY87	FY88	FY89	FY90	FY91	FY92
Timber Sales	76,701	77,242	95,106	20,132	67,031	56,798	66,923	32,070
Special Uses	245,505	232,052	286,770	272,773	269,855	280,321	332,516	447,066
Mineral Leases	774,346	514,733	17,167,292	12,222,776	6,151,595	4,206,179	2,476,165	1,976,099
Rec. Revenue	301,619	323,447	323,091	342,096	512,328	371,214	377,950	436,734
Grazing Fees	159,918	93,933	92,629	107,098	154,048	129,094	173,307	207,661
KV Funds	211,209	140,503	188,588	110,467	132,262	106,459	115,195	79,496
SSF Funds	0	0	0	548	26,860	80,790	119,780	99,305
Purchaser Credit	80,604	32,897	41,358	68,248	38,958	57,778	84,895	18,460
Total	1,849,902	1,414,807	18,194,834	13,144,138	7,352,937	5,288,633	3,746,731	3,296,891

Revenue Category	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Timber Sales	153,532	112,635	108,042	179,015	86,869	67,571	33,442
Special Uses	492,503	113,258	148,345	65,642	161,507	483,854	149,670
Mineral Leases	3,218,247	3,296,673	2,438,829	3,295,406	3,131,603	2,118,483	157
Rec. Revenue	269,658	667,833	468,555	498,421	490,425	570,171	427,176
Grazing Fees	195,529	119,670	60,429	73,460	81,569	69,018	27,384
KV Funds	80,045	191,398	84,106	109,114	53,260	54,299	68,213
SSF Funds	142,544	102,199	49,530	40,175	59,482	44,418	27,197
Purchaser Credit	65,128	127,836	28,790	0	0	0	0
Total	4,617,186	4,731,502	3,386,626	4,261,233	4,064,715	3,407,814	733,239

* FY98 figures do not include revenues for the grasslands. Grassland Information is compiled by calendar year and is not available yet.

List of Preparers

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References

The information in this report is based on PSICC Management Attainment Reports (MAR), Final Budget Documents, INFRA, Silva (Silviculture) Reports, Regional Revenue and 25% Payments to Counties Reports, and individual Program accomplishment reports. All reference documents are available for review at Pike and San Isabel National Forests and Comanche and Cimarron National Grasslands Supervisor's Office Headquarters at:

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Additional copies of this report are available by writing the address above, or by calling at 719-545-8737, or by visiting the PSICC internet website on the world wide web at: http://www.fs.fed.us/r2/psicc/

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